

# Human SULT2A1 / STD Protein (His Tag)



Sino Biological  
Biological Solution Specialist

Catalog Number: 11411-H07E

## General Information

### Gene Name Synonym:

DHEA-ST; DHEAS; HST; hSTa; ST2; ST2A1; ST2A3; STD

### Protein Construction:

A DNA sequence encoding the human SULT2A1 (NP\_003158.2) (Ser 2-Glu 285) was expressed, with a polyhistidine tag at the N-terminus.

**Source:** Human

**Expression Host:** E. coli

## QC Testing

**Purity:** > 97 % as determined by SDS-PAGE

### Endotoxin:

Please contact us for more information.

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Met

### Molecular Mass:

The recombinant human SULT2A1 consisting of 291 amino acids and migrates as an approximately 35 kDa band in SDS-PAGE under reducing conditions as predicted.

### Formulation:

Lyophilized from sterile 50mM Tris, 500mM NaCl, 20% glycerol, pH 8.0

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

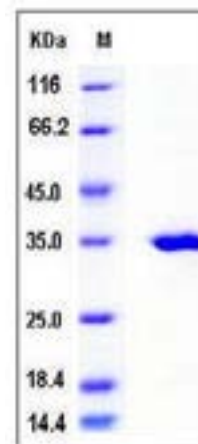
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Hydroxysteroid sulfotransferase ( SULT2A1 ) is a key enzyme in the testicular and hepatic metabolism of 5 $\alpha$ -androstenone, which is a major component of the off-odor and off-flavor in pork known as boar taint. Sulfotransferase enzymes catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs, and xenobiotic compounds. These cytosolic enzymes are different in their tissue distributions and substrate specificities. The gene structure (number and length of exons) is similar among family members. SULT2A1 is a sulfo-conjugating phase II enzyme expressed at very high levels in the liver and intestine, the two major first-pass metabolic tissues, and in the steroidogenic adrenal tissue. SULT2A1 acts preferentially on the hydroxysteroids dehydroepiandrosterone, testosterone/dihydrotestosterone, and pregnenolone and on cholesterol-derived amphipathic sterol bile acids.

## References

1.Chatterjee, B. 2005, Methods Enzymol. 400:165-91. 2.Liu,Y. et al., 2006, Chem Res Toxicol. 19 (11):1420-5. 3.Sinclair, PA. et al., 2006, J Mol Endocrinol 36 (2):301-11.

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